



APPENDIX B16-B LONG TERM WATER QUALITY MONITORING AT TAROOM AND WOODLEIGH

Long term water quality monitoring at Taroom and Woodleigh with results from time series (TS) of electrical conductivity and manual water quality sample collection.

Taroom gauging station

Water quality indicator	Water quality objective	Count	Min	10%	Median	90%	Max	Mean	start	end
Electrical Conductivity (µS/cm) (TS)	<370	5541	38.8		306.2		887.3	314.8	16/07/1993	12/11/2012
Electrical Conductivity (µS/cm)	<370	156	87	150.4	266	395	666	274.1	1/12/1963	11/10/2011
Turbidity (NTU)	<50	121	0.7	5	77	759	2790	252.2	24/07/1981	11/10/2011
Colour (Hazen units)	<50	111	0	6	17	50	150	26.4	24/07/1981	11/10/2011
Water temperature °C (no WQO)	X	160	9	14	23	27.4	31	21.6	3/02/1966	11/10/2011
pH (pH units)	6.5-8.5	156	6.5	7.2	7.7	8.08	8.5	7.7	1/12/1963	11/10/2011
Total alkalinity as CaCO ₃ (mg/L)	X	155	37	58.4	106	153.2	267	106.3	1/12/1963	11/10/2011
Hardness as CaCO ₃ (mg/L)	<150	155	17	35	67	100.8	157	68.3	1/12/1963	11/10/2011
Total dissolved solids (mg/L)	X	152	0	92.2	150	216.5	386	153.5	1/12/1963	11/10/2011
Total suspended solids (mg/L)	<30	142	2	10	51.5	649.8	4900	220.1	13/04/1973	11/10/2011
Nitrate as NO ₃ (mg/L) (X	123	0	0.3	1	3.2	10.0	1.4	13/04/1973	11/10/2011
Total nitrogen (mg/L)	<0.6	65	0.2	0.3	0.7	1.8	3.8	0.9	20/08/1998	11/10/2011
Nitrate and nitrite (µg/L)	<60	70	1.6	3.9	89.6	383.5	1100	159.8	31/08/1994	11/10/2011
Total ammonia nitrogen (µg/L)	<20	70	4.3	7.9	31.9	59.3	163.0	33.0	31/08/1994	11/10/2011
Dissolved oxygen (mg/L)	X	86	0.9	3.1	5.2	8.2	10.6	5.5	25/10/1994	11/10/2011
Total phosphorus p (µg/L)	<70	88	4	25.4	139.1	574.9	1387.1	237.8	31/08/1994	11/10/2011
Filterable reactive phosphorus (µg/L)	<20	70	3.1	5.18	39.9	162.1	340.8	61.6	31/08/1994	11/10/2011
Potassium (mg/L)	X	145	2.4	3.7	5.2	6.7	7.6	5.2	13/04/1973	11/10/2011
Sodium (mg/L)	<30	156	7.7	14	29.5	43.4	118.0	30.3	1/12/1963	11/10/2011
Sulphate (mg/L)	<200	131	0.0,	1.0	2.0	5.0	11.0	2.5	1/12/1963	11/10/2011

Aluminium (µg/L)	<55	94	0.0	0.0	50.0	217.0	1230.0	95.6	15/11/1990	11/10/2011
Boron (µg/L)	<370	111	0.0	0.0	40.0	100.0	1000.0	69.3	13/04/1973	11/10/2011
Copper (µg/L)	<1.4	96.0	0.0	0.0	30.0	50.0	50.0	26.6	15/11/1990	11/10/2011
Fluoride (µg/L)	X	148.0	80.0	100.0	130.0	200.0	700.0	151.4	1/12/1963	11/10/2011
Iron (mg/L)	X	120.0	0.0	0.0	0.045	0.391	4.6	0.2	13/04/1973	11/10/2011
Manganese a (µg/L)	<1900	93.0	0.0	0.0	10.0	30.0	1000.0	25.9	29/07/1984	11/10/2011
Silica (mg/L)	X	143.0	0.3	1.12	11.0	16.82	56.0	10.4	13/04/1973	11/10/2011
Zinc (µg/L)	<8	90.0	0.0	0.0	10.0	51.0	700.0	27.8	3/12/1990	11/10/2011

Woodliegh gauging station

Water quality indicator	Water quality objective	Count	Min	10%	Median	90%	Max	Mean	start	end
Electrical Conductivity (µS/cm) (TS)	<340	2571	79.25		311.1		992.3	369.9	23/03/2003	09/12/2012
Electrical Conductivity (µS/cm)	<340	97	0.0	131.6	265.0	448.0	592.0	279.4	15/10/1985	15/09/2010
Turbidity (NTU)	<50	80	1.0	4.9	88.5	685.0	2418.0	256.2	15/10/1985	18/11/2009
Colour (Hazen units)	<50	83	1.0	8.0	26.0	59.8	122.0	29.8	15/10/1985	18/11/2009
Water temperature °C (no WQO)	X	92	13.0	15.8	25.4	29.0	33.2	23.7	15/10/1985	15/09/2010
pH (pH units)	6.5-8.5	84	6.9	7.3	7.7	8.0	8.5	7.7	15/10/1985	18/11/2009
Total alkalinity as CaCO ₃ (mg/L)	X	84	23.0	46.8	85.0	111.6	143.5	84.1	15/10/1985	18/11/2009
Hardness as CaCO ₃ (mg/L)	<150	84	16.5	38.6	67.3	104.4	138.0	69.3	15/10/1985	18/11/2009
Total dissolved solids (mg/L)	X	84	48.0	95.0	157.0	228.0	333.0	162.7	15/10/1985	18/11/2009
Total suspended solids (mg/L)	<10	84	0.0	9.3	40.0	534.4	2103.0	173.3	15/10/1985	18/11/2009
Nitrate as NO ₃ (mg/L) (X	70	0.0	0.5	1.1	3.0	18.6	1.9	15/10/1985	18/11/2009
Total nitrogen (mg/L)	<0.5	36	0.1	0.5	0.7	1.4	4.7	0.9	17/11/1998	18/11/2009
Nitrate and nitrite (mg/L)	<0.06	35	0.0	0.0	0.2	0.6	3.6	0.4	1/12/1994	18/11/2009
Total ammonia nitrogen (mg/L)	<0.020	35	0.0	0.0	0.0	0.1	0.1	0.0	1/12/1994	18/11/2009

Dissolved oxygen (mg/L)	X	60	0.0	4.1	6.5	9.1	11.2	6.5	27/03/1995	15/09/2010
Total phosphorus p (mg/L)	<0.05	58	0.0	0.1	0.2	0.7	1.5	0.3	1/12/1994	18/11/2009
Filterable reactive phosphorus (mg/L)	<0.020	35	0.0	0.0	0.1	0.2	0.3	0.1	1/12/1994	18/11/2009
Potassium (mg/L)	X	84	4.1	5.3	6.6	7.5	9.0	6.4	15/10/1985	18/11/2009
Sodium (mg/L)	<30	84	6.0	14.3	26.0	43.2	70.5	27.9	15/10/1985	18/11/2009
Sulphate (mg/L)	<200	84	0.0	2.3	3.9	7.0	12.5	4.3	15/10/1985	18/11/2009
Aluminium (mg/L)	<0.055	64	0	0.01	0.05	0.14	0.9	0.08	6/12/1989	18/11/2009
Boron (mg/L)	<0.370	78	0	0	0.04	0.1	0.2	0.05	15/10/1985	18/11/2009
Copper (mg/L)	<0.001	67	0	0.01	0.03	0.05	0.07	0.03	6/12/1989	18/11/2009
Fluoride (mg/L)	X	84	0	0.1	0.15	0.2	0.21	0.15	15/10/1985	18/11/2009
Iron (mg/L)	X	76	0	0.01	0.04	0.20	0.71	0.10	15/10/1985	18/11/2009
Manganese a (µg/L)	<1900	93.0	0.0	0.0	10.0	30.0	1000.0	25.9	29/07/1984	11/10/2011

Data sourced from the Queensland Government water monitoring data portal (<https://water-monitoring.information.qld.gov.au/host.htm>).

'red value' indicates value exceeds water quality objective

X indicates an absence of water quality objective.